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Lab of 2020 will be ‘very different’

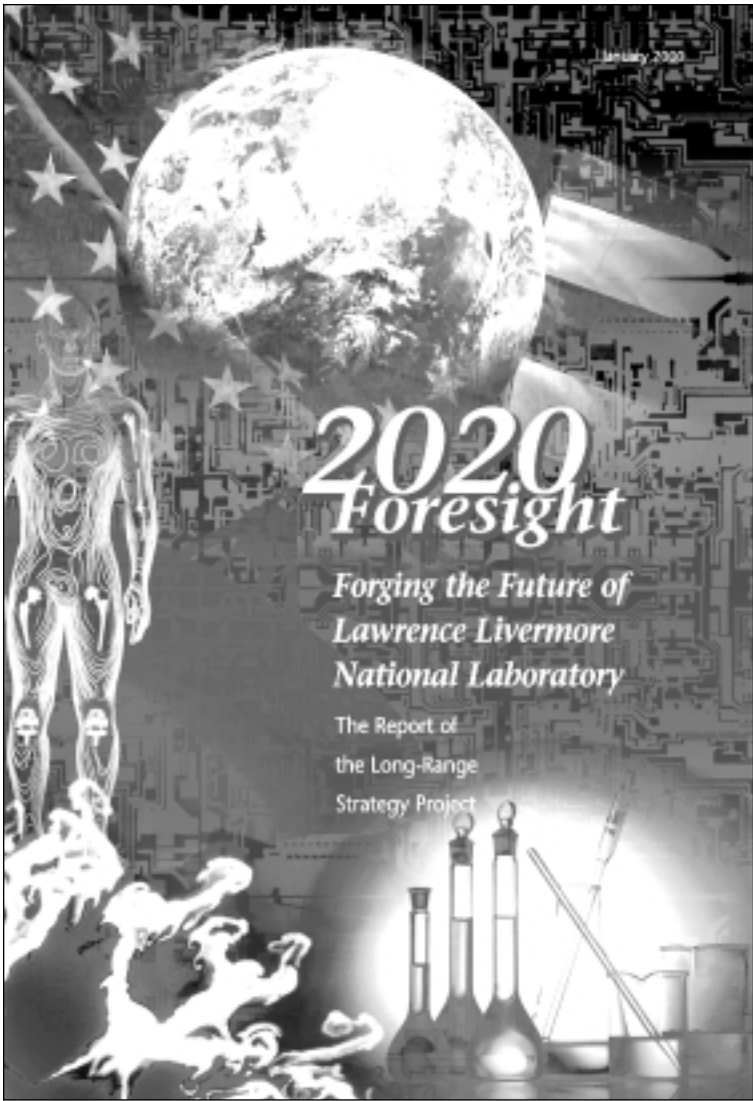
By Don Johnston
NEWSLINE STAFF WRITER

Imagine Livermore without a nuclear weapons program, a virtual workplace of telecommuters, and a University of California national lab with researchers moving seamlessly among Los Alamos, Berkeley and Livermore.

These were among the possibilities considered by the 23 members of the Lab’s Long-Range Strategy Project, which recently distributed its report on what the Laboratory may look like in the years 2015 to 2020. The report, “2020 Foresight: Forging the Future of LLNL,” is now available from directorate offices.

After examining scenarios sometimes bordering on science fiction, the consensus of the group of mid-career scientists, representing the breadth of Laboratory disciplines, was adventurous but pragmatic. No matter what the future holds, most everyone agreed LLNL will be a very different place than it is today.

“We believe we went way out there, but for the most part we came back,” says Greg Simonson, deputy Q Division leader in NAI.



TID

The cover to the newly released long-range strategy report.

“We looked at some very exciting and some bizarre ideas. But we generally came back to solid, rational thinking in our foresights for

See 2020, page 8

Lab computing and genome efforts hit new milestones, Tarter tells UC Regents

Director Bruce Tarter updated University of California Regents Wednesday on the progress of major Laboratory programs, focusing on the National Ignition Facility, Accelerated Strategic Computing Initiative and Human Genome project.

After an overview of the Laboratory’s primary national security missions in stockpile stewardship — ensuring the safety, security and reliability of the existing nuclear weapons stockpile — and stemming the proliferation of weapons of mass destruction, Tarter briefly discussed the evolution and expansion of programs and facilities

See UC, page 5

Better protection of data needed, Browne reports

In a report to UC Regents Wednesday, Los Alamos Director John Browne noted improvements to security at Los Alamos and Livermore national labs, but said more needs to be done to protect classified information.

See SECURE, page 5

Draft GAO report contains misleading cost estimates

A draft report by the General Accounting Office includes misleading estimates on the total cost of the National Ignition Facility.

The draft GAO report, which was obtained by the Wall Street Journal Thursday, gives an incorrect impression of greater cost increases to NIF by including funding for research, development and operating costs that were not part of the original \$1.2 billion construction

See GAO, page 4

New ISM course clarifies safety management roles and responsibilities

A new course has been added to the Integrated Safety Management training package to help improve understanding of roles, responsibilities and authorities during the work planning and authorization process. The course is required training for approximately 1,500 to 1,700 employees, including associate directors.

The training, “Roles, Responsibilities and Authorities for Work Planning and Authorization” (IS0007), is part of the Lab’s “path forward” to Phase B-2 Verification of LLNL’s Integrated Safety Management System. Verification is required by the Secretary of Energy to be completed by Sept. 30. Phase B-2, LLNL’s final step in Verification, is scheduled for Sept. 11-21, a postponement from the original June schedule.

The new training is geared to those who may be designated as responsible individuals (RIs), authorizing individuals (AIs), assurance managers, ES&H teams, AD Facility Managers, facility points of contact (FPOCs), and Associate Directors (ADs). Training for RIs and AIs began Tuesday. Employees will be notified by their directorates if they are to take the training. All employees who take the training will be required to pass a Web-based test to get credit.

Over the next few months, ISM verification will remain a top priority throughout the Lab. With Phase B-2 Verification postponed to mid-September, “there is no flexibility with regard to the secretary’s completion date,” said Bob Kuckuck, deputy director for Operations. “Though we have come a long way in implementing ISM, every employee needs to continue

a vigilant effort in conducting their work safely and securely. This means understanding the ISM basics.”

This includes knowing how to carry out the five work planning and execution functions, knowing how to work with the FPOCs and ES&H teams, and knowing the purpose of an Integration Work Sheet (IWS). All of this information is posted on the Web at http://www.llnl.gov/es_and_h/ism/isms.html

“Employees should review this information periodically,” Kuckuck reminded. “Many Lab people are working very hard to prepare us for the next part of the ISM verification. But there is a job in this for every employee — that is, for us all to put into practice our knowledge of ISM.”

See ISM, page 8



Ringside with
Sen. Boxer

— Page 2



Honor society
promotes science

— Page 3



Dollars for
diplomas

— Insert



LAB COMMUNITY NEWS

Weekly Calendar

Technical Meeting Calendar, page 4

Friday
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Summer students are invited to hear Peter Fiske discuss his research on **meteorite impacts**, from the death of the dinosaurs to the "defeat of Iraq," during a special lecture at 10 a.m. in the Bldg. 361 auditorium. Fiske is a staff scientist in the Physics Directorate, where he runs the 6.5-meter two-stage light gas gun facility to research a diverse set of issues, including the dynamic fracture of materials, high-pressure chemistry and meteorite impacts. Contact: Barry Goldman, 2-5177.

...

Summer students: Here's your chance to perfect your **technical poster presentation skills**. The event is scheduled for Thursday, Aug. 3, from 8:30 a.m.-2 p.m. at the Department of Applied Science, Bldg. 661. Registration deadline is today. Abstracts are due by close of business July 28. To register for the seminar, see the Website at <http://education.llnl.gov/symposium>. Contact: Beverly Williams, 2-5020.

Saturday
22

The LLESA dragonboat team, We Be Dragon, will be participating at the **Bay Area Dragon Boat Championships** at Foster City from 9 a.m. to 3:30 p.m. Come support the team and enjoy a lazy summer picnic. Contact: Sharon Beall, 2-8784, or Chuck Chen, 2-8098.

Tuesday
25

"Financial Abuse of the Elderly" will be the topic at the next **Elder Care Talk** at noon in Trailer 6525, room 100. Jeff Bean, a Lab employee who has a legal practice with the elderly, will share his views on how to recognize financial elder abuse and what you can do to prevent or stop it.

...

Summer students are invited to hear Bo Hammer, director of the **Society of Physics Students** at the American Institute of Physics discuss the myth that there are no good jobs with physics, at 10 a.m. in the Bldg. 361 auditorium. For additional information and registration, see <http://education.llnl.gov/sbb>. Contact: Barry Goldman, 2-5177.

...

The **LLESA Apple Computer Networking Group** will meet on at 7 p.m. in the LLNL Visitor Center Auditorium. Everyone with an interest in Apple brand and compatible computers is welcome to attend. Contact: Jim Branum, 2-6766.

Wednesday
26

National Technological University (NTU) offers Laboratory employees televised graduate level academic courses as well as technical and professional short courses. Diana Randle, NTU Regional Manager, will make a presentation about the program at noon in Bldg. 571 Rm. 2301. Attendees should feel free to bring their lunches. Contact: Kathy, 2-9335.

Contributions to science



Women scientists and engineers from Sandia and Livermore briefed Sen. Barbara Boxer on their contributions to the Commission on the Advancement of Women and Minorities in Science, Engineering and Technology (CAWMSET). From left, Kathy Cromwell, Rosemary Walling, Kim Budil, Boxer, Jane Ann Lamph (Sandia), Mary Clare Stoddard (Sandia) and Tristan Pico.

RETIREE'S CORNER

By Bob Becker

LLNL RETIREE

My business trip was canceled, so I am able to write this month's column. For whatever reason, there has been very little input this month, so I'll do my best to bring you up to date on the information about the Lab retirees that I am aware of.

...

A sad incident was the passing away of **Dean Warner**. Dean, Steve Chin and I walked to and from the Lab along East Avenue, and during that half-hour walk we were able to solve the Lab's and the world's problems. Dean transferred from Berkeley in the very early days of the Lab. He spent so much time in the Pacific and at Nevada that the department secretary was convinced that the real Dean Warner never existed.

Although he spent most of his career in Mechanical Engineering, he was the classification officer and was involved with the plant manager's office and Plant Engineering. Dean enjoyed traveling and visited many exotic places after his retirement. A number of his fellow workers attended the memorial

service including **Bob Ashworth** (M.E.), **Evellyn Heald** (M.E.), **John Murphy**, **Don Ferrarrio** (Electrical Engineering), **Alice Haussmann** (Carl's wife) and **Jane Southwick** (Ernie's wife). I should not have started this list because I didn't take any notes, and I know that I am overlooking many Lab retirees who attended.

...

The annual picnic was its usual success. The weather was perfect, and it is always fun to chat with Lab retirees you haven't seen for years.

...

I discussed with **Chuck Miers** the lawsuit involving retirees who were under PERS, and therefore not entitled to some of the golden-handshake retirement programs. It appears that after all these years, the legal eagles and the courts are still involved, including appeals, etc., and that it may go all the way to the Supreme Court.

...

I apologize for this limited column. Please contact me with any news about yourself or other retirees: Bob Becker, 1690 Frederick Michael Way, Livermore,

IN MEMORIAM

Donald Bowman

Donald G. Bowman, a Lab retiree, died July 17 in Williston, N.D. He was 70.

Bowman was born in Williston and served in the Army during the Korean War, for which he received a Bronze Star. He worked at the Lab for more than 28 years before retiring in 1985.

He is survived by his wife, Lylas, two children, nine grandchildren and two great-grandchildren.

Protective Force Officers play ball for kids in need

Officers within the Lab's Protective Force are asking employees to come out and cheer them on as they participate in a charity softball tournament to benefit Federal Protection Officers Helping Children in Need.

Proceeds from the tournament will go to battered and abused children.

The tournament takes place from 8 a.m. to 8 p.m. Saturday, Aug. 12 at Marvis Stouffer Park, East Main Street and Manley Avenue, in Ripon.

Admission to the tournament is by donation only. Concessions are available.

RETIREMENTS

Ross Calvert of the Applied Research Engineering Division is retiring, after 34 years at the Lab. A retirement "roast" will be held in his honor on Thursday, Aug. 24, 2-5 p.m. at Beeb's Sports Bar & Grill in Livermore. Price is \$24 and includes a buffet meal. To RSVP, call Audrey Butler, 2-6696, or Jessica Barraza, 2-6750, no later than Aug. 14.

Newsline

Newsline is published weekly by the Internal Communications Department, Public Affairs Office, Lawrence Livermore National Laboratory (LLNL), for the information of Laboratory employees and retirees.

Managing Editor:
Staff Writers:

Lynda Seaver, 3-3103
Don Johnston, 3-4902
Elizabeth Campos Rajs, 4-5806
Julie Korhummel, 2-9709
Mail Services

Public Affairs Office, L-797 (Trailer 6527), LLNL, P.O. Box 808, Livermore, CA 94551-0808
Tel: (925) 422-4599; Fax: (925) 422-9291
e-mail: newsline@llnl.gov



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AROUND THE LAB

Science honor society vows to support Lab outreach

The Laboratory chapter of Sigma Xi vowed to work to promote science education and research during a ceremony inducting new officers last week.

“Continuing our emphasis on promoting science education and research at all levels, this is going to be an exciting year for Sigma Xi at LLNL. It’s important for Sigma Xi to continue to promote education programs and public understanding on two fronts,” said Ron Weinberg, newly elected president of LLNL’s chapter of Sigma Xi, the international honor society that is the science analog to Phi Beta Kappa.

“The first is our continued participation in programs like Science on Saturday and the TOPS program, a unique instructional program coming to the Livermore schools for the first time, blending the expertise of



DON JOHNSTON/NEWSLINE

From left: New Sigma Xi officers Walt McNab, secretary, Kathleen McCandless, vice president, and Ron Weinberg, president, were elected at a ceremony at the Concannon winery. Not pictured is Dorothy Bishop, who will continue as society treasurer.

seasoned researchers and classroom teachers,” Weinberg said. “We’ll also be co-sponsoring the first Edward Teller Symposium in September. In

order to ensure an adequate supply of young scientists, we’re also reaching out to the community and exciting students with some of the cutting-edge developments at the Laboratory, including research that could revolutionize food safety and the way food is prepared worldwide.”

Kathleen McCandless was elected vice president and Walt McNab elected secretary. Dorothy Bishop will continue as treasurer. The LLNL chapter of Sigma Xi currently has about 80 members. Weinberg said recruiting scientists from within the Lab to join Sigma Xi and get involved in its programs will be a high priority over the next year.

“We’re planning a dynamic, cutting agenda that places the importance of science education and research at the forefront of Laboratory priorities,” he said.

For more information, contact any of the officers. For background reading, Sigma Xi has a web site at www.sigmaxi.org.

Briefings designed to keep security foremost in employees’ minds

By Jeffrey C. Morris

TECHNICAL INFORMATION DEPARTMENT

Security is on everyone’s minds these days, and with good reason.

From the time the Laboratory was founded in 1952, people working here have developed a reputation for doing first-class science as well as first-class security.

“It is a reputation that has taken almost half a century to develop and to maintain. It is also a reputation that has been challenged recently — every one of us who works here needs to support the Laboratory’s efforts to be tops in science and security.” So said Information and Security Awareness Coordinator Laurie Pearson in her introduction to the 2000 Security Refresher Briefing (SRB).

The 2000 SRB is one of two security briefings that are now on the “must see” list for most people working at the Laboratory. The other is the annual information security (INFOSEC) threat briefing.

The purpose of these two briefings is to make sure security stays fresh in the minds of people who work at the Laboratory, and to meet Department of Energy and Laboratory requirements.

The annual SRB has been a mainstay of LLNL’s security awareness effort since 1991. The INFOSEC threat briefing was first presented last year. Laboratory employees and contractors who are required to take these two briefings have until Friday, Sept. 29, to do so.

The 35-minute INFOSEC briefing is titled, “Information Security Threats: Recent, Real, and Relevant.” Bill Cleveland, manager of the Security Awareness for Employees (SAFE) Program, presents the videotaped briefing in collaboration with Pearson, who also serves as the Laboratory’s INFOSEC point of contact.

The purpose of this briefing is to alert Q-



Security Awareness For Employees

cleared and L-cleared Laboratory employees and contractors to information security matters. It includes recent incidents that have occurred at LLNL, within the U.S. government and nationwide.

A flyer announcing the briefing states that “Information Security Threats: Recent, Real, and Relevant” will alert you to some incidents that may have occurred as close as your desktop, and to other incidents that are as significant as the breaches of security at the State Department.”

It also says, “The work that goes on here is of interest to many other people, including those who are intent upon gathering information and using it in ways that could be detrimental to the defense and economic interests of the United States and its partners, or in ways that could disrupt our work.”

Videotapes of “Information Security Threats: Recent, Real, and Relevant” will be available to Laboratory departments through the SAFE Office, 2 5557, beginning Monday, July 24. Departments will schedule screenings and document attendance.

All Q-cleared and L-cleared Laboratory employees and contractors at the Livermore site, Site 300, and the Nevada Test Site must see this briefing. The briefing is classified; an L or Q clearance is required to see it.

The other required briefing, the 2000 SRB, became available on line last month. Pearson originated the SRB, which has been published by the Safeguards & Security Department’s Information & Security Awareness Group for 10 years.

In the past, only Q- and L-cleared employees were required by DOE to read the annual SRB and pass the quiz at the end. This year the requirement applies to all LLNL employees and to most contractors.

Everyone employed by LLNL, including cleared and uncleared employees, contractors, and supplemental laborers, must read the 2000 SRB, take the quiz, and send in the verification form. The SRB also will be available in booklet form from department offices for people who do not have access to unclassified computers and who have requested booklets through their departments.

People who do not have to take the 2000 SRB are: visitors; off-site contractors without clearances; contractors whose clearances are held at other DOE facilities; and DOE employees.

The annual SRB is available on line through the Safeguards & Security Website (<http://www-security.llnl.gov/ssdpub/IPSD/refresh00.html>). It also is accessible through the Grapevine Intranet (<http://www-r.llnl.gov/>). Click on Safeguards & Security Program, Information Resources, 2000 Annual Security Refresher Briefing.

The 2000 SRB normally takes about an hour to complete, including taking the quiz at the end. Its purpose satisfies DOE’s requirement that all employees have an annual security refresher briefing, and serves as a basic guide and security information reference for everyone working at LLNL.

Pearson recommends completing the annual SRB at the earliest opportunity, and seeing the 35-minute INFOSEC briefing as soon as your department schedules a screening for you.



NEWS YOU CAN USE

GAO

Continued from page 1

cost line item, but were included in planned operational costs. The GAO also lumped funds for target research, which has always been a part of the ICF research budget prior to NIF and is now including them as “new costs to NIF.”

The report adds those figures to give the impression that NIF’s costs have soared from \$1.2 billion to \$3.9 billion.

The Laboratory maintains that no matter which way the numbers are added, comparing the original estimates to the new estimates, the total difference is the same — an overall construction budget increase of \$1 billion.

The draft report is expected to be formally issued next month by the GAO. DOE is currently reviewing the document for technical accuracy.



INTERNAL TRANSFER OPPORTUNITIES

Requisition	Classification	Title	Organization
436	105.4	Principal administrator	Computation
553	150.2	Senior resource analyst	Safeguards and Security
666	151.2/3	Senior/principal accountant	Finance
675	164.4	Technical editor/writer IV	Technical Information Department
596	200	Scientist	Chemistry & Materials Science
598	200	Scientist	Chemistry & Materials Science
599	200	Scientist	Chemistry & Materials Science
600	200	Scientist	Chemistry & Materials Science
649	200	Scientist	Computation
645	242	Chemist	Chemistry and Materials Science
648	249	Engineer	Mechanical Engineering
679	270	Physicist	Defense & Nuclear Technologies
638	302.1/2	Scientific associate	Defense and Nuclear Technologies
654	337.1	Engineering technical associate	Electronics Engineering
671	391.1	Superintendent	Mechanical Engineering
318	393.1	Systems & network associate	Electronics Engineering
668	405.3	Administrative specialist III	Defense and Nuclear Technologies
524	405.3	Administrative specialist III	Plant Engineering
174	405.3	Administrative specialist III	Safeguards & Security
630	405.4	Administrative specialist IV	Procurement & Materiel Department
662	405.4	Administrative specialist IV	Biology & Biotechnology Research Program

More information on these job postings as well as those at other UC sites and outside organizations is available through the World Wide Web. Go to the Lab’s internal home page, click on “Services,” then click on “Career Center.” Once there, scroll down to “Information and Resources,” where links to internal and external postings can be found.

Technical Meeting Calendar

Friday 21
H DIVISION
“Computational Physics at the Frontier of Technology: Semiconductors and Molecular Electronic Devices,” by Seong-Gon Kim, Vanderbilt University. 9:30 a.m., Bldg. 211, room 137 (uncleared area). Contacts: Giulia Galli, 3-4223, or Darlene Klein, 4-4844.

Monday 24
INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH
“First-Order System LL (FOSLL): Scalar Elliptic Partial Differential Equations,” by Zhiqiang Cai, Purdue University. 10 a.m., Bldg. 451, room 1025 (uncleared area). Contacts: Rob Falgout, 2-4377, or Leslie Bills, 3-8927, or <http://www.llnl.gov/casc/calendar.shtml>.

Tuesday 25
INSTITUTE FOR SCIENTIFIC COMPUTING RESEARCH
“Modelling Axisymmetric Laminar Flames: An Application of Local Rectangular Refinement Solution-Adaptive Gridding,” by Beth Anne Bennett, Yale University. 10 a.m., Bldg. 451, room 1025 (uncleared area) Contacts: Rick Pember, 2-4549, or Leslie Bills, 3-8927, or <http://www.llnl.gov/casc/calendar.shtml>

CHEMISTRY & MATERIALS SCIENCE
“2nd Annual CMS Post-Doc Symposium.” 8:30 a.m. to 4 p.m., Bldg. 151, Stevenson Room (uncleared area). Agenda: 8:30-noon,

oral presentations; 2-4 p.m., poster session. Contact: Kim Hallock, 2-1748.

Wednesday 26
INFORMATION SCIENCE & TECHNOLOGY
“Applications of Femtosecond Pulse Shaping,” by Jonathan Heritage, Department of Applied Science, University of California, Davis. 1 p.m., Bldg. 481 auditorium (cleared area). Contact: Bernice Wootton, 3-8578.

Thursday 27
BIOLOGY & BIOTECHNOLOGY RESEARCH
“Ape1: Structure and Dynamics,” by Peter Beernink, LLNL. 10:30 a.m., Bldg. 361, room 1155 (uncleared area). Contact: Sue DeWitt, 3-6290.

Friday 28
INFORMATION SCIENCE & TECHNOLOGY
“Heat Resistance of EUV Multilayer Mirrors for Long-Time Applications,” “Coating Organic Polymers for Optical Applications,” and “Resistant UV Mirrors for Free-Electron Lasers,” by Norbert Kaiser, Alexandre Gatto and Ulrike Schulz, Fraunhofer Institut, Jena, Germany. 9 a.m., Bldg. 481 auditorium (cleared area). Contact: Bernice Wootton, 3-8578.

DOD PROGRAMS OFFICE
“Directed Energy Applications for Tactical Airborne Combat (DE-ATC) Study,” by William Dungan, Air Force Research Laboratory, Kirtland AFB. 10:30 a.m., Bldg. 381 auditorium (cleared area). Contact: Marsha White, 3-7697.

Monday 31
INSTITUTE FOR LASER SCIENCE & APPLICATIONS
“A 17 GHz High Brightness Electron Gun,” by Winthrop Brown, MIT Plasma Science and Fusion Center. 10 a.m., Bldg. 219, room 163 (open area). Contacts: Fred Hartemann, 3-3398, or MaryAnn Soby, 3-1102.

UP & COMING
SEPT. 6-8 HAZARDS CONTROL
Hazards Control is sponsoring an exam preparation course for the Associate Safety Professional Exam. The ASP exam is the first in a two-step exam process leading to the CSP or Certified Safety Professional designation, which is widely recognized in the safety community. The course will be taught onsite by an instructor from the American Society of Safety Engineers on September 6, 7 & 8. The cost of the course is \$650. Sign-up through LTRAIN, HS7800. Contact: Mark Ludwig, 3-1143.

Deadline for the next calendar is noon, Wednesday, July 26.

- Address e-mail to tmc-submit@llnl.gov or fax to 2-9291.
- Mail listings to Technical Meeting Calendar, L-797.
- Telephone ext. 2-9709 for information regarding the printed calendar.



NEWS FROM UC

UC

Continued from page 1

over the last three decades.

With the end of nuclear explosive testing in 1992, Tarter said the Lab is fulfilling its stockpile stewardship responsibilities with “large scientific facilities, computers and other experimental facilities.”

The NIF laser project and ASCI are “national security projects with science applications,” he said, adding that “the human genome project also has national security implications.”

Tarter described NIF as a “laboratory setting to take a very small amount of fuel, about the size of a pencil eraser, compress it with large lasers to create thermonuclear conditions and study things similar to those found in a nuclear weapon.

“It’s one of the mainstays of trying to do the nuclear weapons job without nuclear explosives testing,” he said. “It’s also an outstanding science facility and when completed will have applications in energy research.”

Tarter said that in the last year, “significant issues arose with schedules and budgets” to build what will be the world’s largest laser. “It’s a complex story. But there were basically two issues. We and many other people in the government started this project with too little contingency, too little reserve for an R&D project. This is not uncommon,” he said. “We simply thought we could do better as we went through it. That was a significant issue.

“A more significant issue turned out to be that we could not build the final assembly of this laser using the same methodology we successfully employed for the previous six lasers,” Tarter said. “It was too hard and specialized a job and we are now contracting out to industry. It was simply beyond the scale of the Lab for the first time in the six or seven laser projects we’ve built.”

None of the reviews, including those that the Lab conducted, “caught the fact that this construction assembly was more complex than any of the previous lasers by a significant factor,” he explained.

The Laboratory and UC, through the UC President’s Council on the National Labs, have put together a new management team and brought in “an enormous amount of outside expertise” to address laser project issues, Tarter said. Experts from industry “have helped us get the project back on track in a business and management sense.”

In addition, he said the project has been the subject of “extensive external review” — the Secretary of Energy’s Advisory Board (SEAB), UC and a

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If the environment and the work is exciting at the Lab, people are willing to come for a couple of years, and then they get hooked.

Bruce Tarter

”

“top-notch review panel” the Lab has created.

In August the project will undergo the “Lehman” restructuring review, which will examine the laser from “the nuts and bolts” through every piece of the project, Tarter said. “This last review will really test all the work we’ve done in the past year.”

He reported that the conventional building is now about 90 percent complete and that the focus of activity is on building all of the interior support for the laser. “The final contract for that is being done.”

Describing the laser as a “huge optical instrument” similar to a camera, Tarter said “extraordinary technical progress” in optical development has been made in the rapid growth of crystals, which convert light into a useful form, and producing large-scale laser glass meeting very high purity requirements.

Responding to a question after his presentation, Tarter said though additional funding has not yet been approved by Congress, “I think we have the resources and the people we need to complete the project. The people we’re employing are the best there is,” he said. “I’m confident we can do this.”

Calling “numerical simulation for science” a “hallmark of all three national laboratories,” Tarter said to fulfill its nuclear weapons responsibilities the Lab needs to make “gigantic jumps” in computational power.

“We’ve embarked on a partnership with industry to develop super supercomputers,” he said, going on to detail IBM’s delivery of ASCI White to the Laboratory over the summer.

Noting that these are “not just acquisitions but intimate business partnerships” that involve devising the configuration and architecture that best suits the Laboratory’s needs, Tarter said “this (ASCI White) is a truly amazing machine. It will be the first one with more than 10 trillion operations of computing. This will allow us to do the kind of work we need to do.”

The previous machine, ASCI Blue Pacific, was

able to conduct the first three-dimensional simulation of a nuclear weapon primary in December 1999, he said. “The laboratories are particularly interested in applying this computing power to climate research and protein structure. It’s an extraordinary capability for the world and the country.”

Turning to human genome research, Tarter noted that “the conception and the beginning of the human genome project — the goal of describing each one of us — was not an invention of the National Institute of Health, it was done by the DOE laboratories.”

One of the important steps in DOE’s effort to map the human genome was the consolidation of research efforts at the three laboratories managed by UC, including Lawrence Berkeley National Lab, into the Joint Genome Institute in Walnut Creek, he said.

Completion of the international effort to sequence the human genome — recently announced by President Clinton and British Prime Minister Tony Blair with much fanfare — was made possible in part by technological developments at the national labs.

“This is only the beginning,” Tarter said, adding that the sequence will allow the study of disease. “There’s a tremendous future.”

Expertise in genome sequencing at Livermore and Los Alamos has been applied to national security efforts to develop biodetection technology that allows troops in the field to analyze air samples for harmful bioagents, Tarter said.

In concluding his presentation, Tarter told the regents that through his extensive contacts with Lab employees, he has found “a unanimous feeling of how pleased they are to be a part of the university and how important it is to them.

“The whole issue of staff recruiting and retention is a major issue right now and one that is near the top of my list every day,” he said.

Addressing regents’ concerns about the laboratories’ ability to recruit and retain qualified people, Tarter acknowledged that “we’re having difficulty recruiting parts of the high technology world. That’s no surprise.

“In the absence of security issues, we can hold our own. Security has made it more difficult,” he said, adding that recruitment is not necessarily a matter of offering an attractive salary package. “We offer attractive work in lieu of a salary package. We’re not competitive with the top end of Silicon Valley, but I think we can offer attractive work. If the environment and the work is exciting at the Lab, people are willing to come for a couple of years, and then they get hooked.”

SECURE

Continued from page 1

Browne also sought to clarify misunderstandings and misperceptions resulting from the much-publicized disappearance from a Los Alamos vault earlier this year of two hard drives containing classified nuclear weapons information.

“There’s an impression left that people at the labs don’t care about security,” he said. “That’s just not true. Our employees are dedicated public servants. They believe in the labs’ mission.”

The creation of and access to classified information is also commonly misunderstood, according to Browne. “The people at the labs who have the information aren’t given the information, they create the information. A vast majority of them follow procedures.”

The vault from which the hard drives disappeared was protected by multiple layers of security, such as a badge for access to a limited area and biometric reading, he said. “We’re not talking about people just wandering in.

“There aren’t any excuses for these hard drives to disappear,” he said, adding the incident is still under investigation to determine if the hard drives were lost, misplaced or deliberately taken.

Browne worried that such an incident could compromise the Nuclear Emergency Search Teams whose members “risk their lives when they go out into the field.”

Since the hard drive incident, additional security requirements have been put in place, he said. People are now required to log in for access, and items contained in the vault have been bar coded.

He noted that DOE rules governing secret and top secret data were relaxed after the end of the Cold War, and that there’s no longer “strict accountability” for those information categories, he said.

“Congress was surprised when we told them that secret and top secret documents are no longer accountable,” Browne said, adding that the directors of Los Alamos, Sandia and Livermore have expressed concerns about that lack of accountability.

While the UC contract with DOE to manage the labs specifies that the university is responsible for security, Browne said responsibility has to be shared with DOE because “they set the rules.”

DOE conducts audits and determines if security standards are being met in physical, information and cyber security, he said.

After the latest DOE security reviews, both Los Alamos and Livermore security were rated satisfactory, the highest rating given by the department.

Browne said new DOE security requirements for cyber security have not been accompanied with additional resources. “We have to do it,” he said. “We have to do it by balancing our priorities.”

The labs also implement measures that go beyond requirements at their own expense, he said. “You’re in a catch-22 situation. You can continue to do it, but you

don’t get the resources to do it.”

While there are shared responsibilities, Browne emphasized that the people who create classified information must ultimately be held responsible for the security of that information.

“Regardless of what security system we use, the people who create the information have to be responsible and accountable,” he said.

Security has to be integrated into lab operations the way safety has been through Integrated Safety Management, Browne said. “This should not be a compliance-based issue. People have to get into their minds that security is a part of the way they work.”

During the question and comment period following the security update, Lt. Gov. Cruz Bustamante told Browne, “you’re responsible for security, the university is responsible. If the university is going to take on the management of these two facilities, we cannot continue to have the kinds of breaches that have taken place.

“We always have to guard against that. We owe that not just to the management contract, because it’s not just a management contract we have here,” Bustamante said. “We owe it to the security of this nation, and I don’t think that can be understated in any way.

“I take this very very seriously and I know you do as well,” he said. “This university has to be able to be up on top, on guard all the time.

“We have to have a system where we are as difficult on ourselves as other people are because the stakes are just too high,” Bustamante concluded.



CLASSIFIED ADS

Check out the Employee Ads Web Services site at:
<https://www-ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1995 - Chev S10 Blazer LT 4X4, 4 door, White, Fully-loaded excellent cond. Must See!! 15,000.00 925-606-7439

1994 - Honda Civic LX; Grey; 90K miles; excel.condition; Power Windows/locks; Air-coniditioning; CD player; Runs Great; gets ~35MPG \$6800 or best offer. 925-275-1801

1995 - Honda Accord, 4cyl,5sp,PW,PB,PS,leather... Loaded...67000 mi,\$11,800 obo. 209-833-1963

1990 - Chrysler Town and Country Van. Excellent Cond., Good Tires, One owner. 139,000 miles. Price: \$5000. 209-835-8874

1987 - Toyota Supra Liftback, 6 cylinder, 5-speed. Fully loaded, all power, excellent condition. One owner. 167K miles. Asking \$3850. 925-373-6833

1993 - Plymouth Grand Voyager, 89K mi, Auto, Quad seating, 7 passenger, Air, ABS. \$6,400. 925-455-6750

1998 - Saturn SC2 silver,37K miles,AC,auto,pw,pl,ps, foglamps,rear spoiler,alloy wheels, alarm, CD,excl condition, KBB retail \$14400, ask \$12500/obo 925-837-2299

1996 - Ford Taurus full power; air; A1 cond. 49K miles. \$9000 925-447-6728

1994 - Mercury Sable LS, 3.0 V6, AC/PS/PW/PL/ABS, tilt, cruise, AM/FM cass, new water pump, new back brakes, 112K, excel. cond. \$5,700/OBO. 209-833-6130

1987 - Nissan Pathfinder SE 4x4. Dark Blue. Runs and looks great. Mechanically sound. Dependable. Tow package. \$5,000. 925-625-0520

1964 - Triumph Spitfire, convertible,no smog required,some rust and bondo, new starter,battery,generator and tires,runs well,\$900 OBO 925-443-4895

1991 - Cadillac Seville V8 Auto Bose Stereo, Leather Power Everything. 76k Excellent Condition.8500/BO 510-881-0671

1991 - Ford T-bird midnight blue, leather trim, new tires & trans. Low miles on engine. All Electrical great condition. \$3,800.00 obo. 510-357-8671

1989 - Toyota Pickup, strong 22R engine, tinted Leer shell, Alpine CD stereo w/remote, Ungo alarm, rims and tires, lowered, black, price reduced to \$2900 925-455-6174

1988 - Nissan Maxima: white;189K miles;5 speed; sun-roof/AC;power windows/door locks;fuel injection/V6: Mint Condition. \$330 925-216-4834

1991 - Acura INTEGRA LS, 5spd 2dr HB, 106K, 1-ownr, AC, snrf, runs perfectly, no dents, metallic champagne color, \$5000 firm 510-568-5454

1998 - Jeep Wrangler. Black, 30K mi., 4in lift, 32in tires, custom wheels, nice stereo w/CD, soft top, 4cyl, 75K warranty. \$16,500 OBO 925-516-5636

1993 - Honda Accord LX, automatic,4 door, ruby red, mint condition, 68k miles, one owner, \$9K 925-243-1749

1983 - VW pickup w/shell. Diesel. 40+ mpg. 5 spd, AC, new clutch, tires, lots more. very dependable. \$2400/obo 925-240-7019

1997 - 1997 Acura CL Sunroof CD w/Bose Speakers Under Warranty Mint Condition 33K Miles \$19,500 B/O 925-556-2325

1997 - Crown Victoria, 28K miles, power everything, leather, excellent shape. \$17000 obo. 925-256-7112

1967 - Mercury Cougar, 2 door, yellow w/ black interior, automatic, AM/FM cassette, 289 engine, Good Condition. \$2750.00/BO 925-373-1067

1995 - Honda Accord EX Wagon,73K,great condition,AC,PS, PW,PDL,ABS,sunroof,AM/FM/cassette.\$11,200/B.O. 925-426-6872

1992 - Geo Metro Convertible. Original owner, very good condition, 5-speed, great gas mileage. Cute little car! \$3000. 209-578-9832

1988 - Honda Accord, good looking red 2 door hatchback, AC, stick, AM/FM tape, new tires and timing belt, good condition, mileage 30+ mpg, \$2500 OBO. 925-256-0111

1988 - Audi 80--149K miles -good condition. dark grey, 4 door, auto trans, \$3500 OBO 925-447-0769

1989 - Nissan Maxima SE 5spd,PS,PB,AC,Pwr win/dr lks, Moon roof, GT 3000 V6, Bose Stereo. Excellent condition. \$3500 925-455-0626

1965 - Falcon Future 4-door station wagon. New 289 V8 motor and transmission. Second owner, extra clean, \$5000 OBO. 925-373-1851

1989 - 1989 - Oldsmobile Royale Brougham, Maroon color, 4-door, 155K miles. In good condition. Ask \$1,000. Please call 925-455-0719

1999 - Toyota 4 Runner Black, 4WD, 6cyl, Loaded, PW, PL, CD, Looks and runs great. 925-989-9387

1967 - Dodge Dart GT, 225 slant 6, AT, runs, needs minor mechanical and body work. Reliable driver for my 80 mile commute. \$1200/obo. 510-769-0887

1997 - Pontiac Transport 7 passenger van A/C,P/S,P/B,P/L,P/W, sec.alarm private glass, cargo rack 42,000 miles well maintained, looks great!! 209-892-7878

1996 - Saturn SC2 Coupe Fully loaded AC, Cruise, stereo, sun-roof & more. Manual trans, low miles, great commute car. Starting family-must sell. \$11,000/OBO 925-417-8984

1998 - Honda Civic EX, White 2 Dr. Coupe, Fully Loaded, Tinted Windows, Alpine CD Changer, 4 brand new in the box Honda wheel coverings, bra, 37k, \$12,500 925-447-4119

1972 - Plymouth Duster, original owner, excellent condition. Call if interested. 925-689-3934

1998 - SATURN SL2;Silver Plum;5spd;4dr;frntend covr,bck wndw tint;A/C,kyls entry-alarm;dual air bgs;Txf 5yr/75000 ext wrnty;39Kmi-Ret\$11925-Ask\$11700/OBO. 925-373-8354

1973 - Jaguar, Chevy conversion (350/350) ground effects kit, new:engine, transmission, tires & wheels, new radiator, power steering rack, stereo system. 925-449-9038

1998 - Nissan 240SX - Automatic, Showroom perfect condition; 13K miles. \$16,700/OBO. 925-443-1238

1994 - Saturn SL1, 5-spd, 4-DR, A/C, white w/tinted windows,

111K/good condition, alarm, 5,500/OBO - 209-836-3554

1990 - Ford Probe LX Hatchback 2D, V6-3.0 liter 5 sp. fully loaded w/ flip top. Great little sports car. 97k miles. \$3500 OBO 925-803-1191

1996 - Camry DX 4-door, 4 cyl., 62K, auto, air, AM/FM Cassette, Power windows/door locks/mirrors, anti-theft, good condition, sacrifice \$10,700. 209-547-0980

AUTOMOBILE ACCESSORIES

TRADE: SmittyBilt front and rear black tubular bumpers with hitch receiver for stock front and rear bumpers which will fit my 1986 4-Runner. 925-449-6911

2 Used Bridgestone Potenza RE71 Tires Size 275/40ZR17 11,500 miles \$50 ea. 925-846-0528

New tire/wheel 205x75x15 also-snow tires 925-735-6002

Fiberglass cover for 86 short wide chevy p/u all mt. hardware,good cond. \$100.00 call after 5pm 925-371-1780

Toyota Rpr Manual for 1987 Corolla, unused \$9. Car cover elastic for sedan, unused. \$15. 925-443-1778

Receiver trailer hitch for 90-98 Taurus 1 3/4 inch \$50.00 510-783-9923

BICYCLES

Child Seat, incl mounting hardware, exc cond, \$12 925-447-2508

Mountain Bike, 19 inch Shwinn Paramount PDG40 Series LX Group. DX top Bar shifter. Ritchie Vantage wheels. Like new. Used twice. \$225.00 925-373-9218

Mountain Bike-Diamond Back Curaca Red -16 inch frame with 24 inch wheels-10 speed Excellent Cond. \$70.00 925-443-7752

BOATS

Boat Oars, 6 Foot, in good shape. \$20.00 for the pair. 925-447-1009

1979 Mastercraft. 21 ft, 351 Ford Engine. New Carpet & Battery. Just tuned up. Runs great! Ready to go. Same owner for 12 years. \$6600 OBO. 209-824-1938

1973 Tahiti 350 engine w/mild cam, 6-71 supercharger, MSD ignition, hydro place diverter. Red & white, excellent condition. \$5000./BO 209-639-2769

1993 SeaDoo (2 person). Well maintained, low hours, and cover. Great shape and ready to go. \$4,000. 209-836-4973

50hp merc needs one control cable.9.9 game fisherman sears. both for \$400 or B/O. 209-944-5993

19.5 foot Saber Jet Boat hull. Cheap. Please make me an offer. 209-833-6452

CAMERAS

Will buy your old used camera and video equipment. Call for a quote. 209-462-8077

ELECTRONIC EQUIPMENT

Riccar sewing Machine, works great, excellent for heavy material mending and fine fancy stitching Manuals included. \$25.00 925-455-9943

Sharp Color TV 21 in. hardly used \$49. RCA 9 in. B&W TV-110v & 12v ideal for RV, cabin, in orig.box.\$29. Computer keyboard drawer unused \$5. 925-443-1778

Audio cassette high speed copier, TELEX brand. \$30.00 925-447-6670

Yaesu VX-1R Dual Band HT. w/Cig. lighter charger. Wide band RX \$75.00 925-447-9273

Macintosh Performa 1600 w/monitor, keyboard and cart \$300/BO; Stereo w/record player, AM/FM, dual cassettes and two speakers \$50 925-243-9123

Mac Performa 630 CD computer, 13 inch color monitor, HP printer, extended keyboard, turbo mouse and modem, lots of software. \$275/obo 510-881-8536

Onan Geneator,2 Cyclinder, 4 cycle,Output 4,000K, 300hrs. \$750. or B.O. 925-606-9525

20 inch Monitor Apple multiscan with PC adapter in excellent condition \$350.00 OB 510-783-9923

HP-41c ACCESSORIES. Card reader, cards, quad memory, battery pack, manuals. 925-443-4918

Sub-woofer - 100 watt, 12 inch with dual coils. Radio Shack, paid more than \$100. Perfect condition. \$35. 925-455-5624

GIVEAWAY

SOFA-Blue leather-well worn but comfortable. 925-846-8405

Free rabbit supplies: Lik-it water bottles w/drips, food dishes, breeder box, etc. I can bring to LLNL. 925-229-2240

MICROWAVE. Good condition. Size: 23 inches by 18 inches by 15 inches. 925-449-7262

HOUSEHOLD

CARDBOARD Boxes, sturdy, moving/storage: Big and Bigger: 40 for \$50, Huge: only \$2 ea. 925-447-7070

Moving sale. TV \$120; Twin Queen bed \$120; 2 twin single bed \$70 (each); table + 4 chairs \$120; sofa \$50 925-443-1912

Bissell Power Steamer Model #1631 compact unit for carpets and upholsteryincluding manuals and cleaning solutions. \$25.00 925-455-9943

Sears, Wood-Lathe. All cast-iron, 3-steppulley, 4-cutting tools, motor, stand. \$75.00. Dremel 15-inch Scroll-saw. \$15.00. 925-447-6099

Hoover floor polisher, w/manual, for scrubbing, waxing, polishing & buffing. Hardly used. \$25. 925-443-3075

Laundry sorter, 3 pockets, unused. \$8.Kitchen bar stool \$4.Beanbag chair \$5.B&D Cordless Drill \$9.Skil Cordless screwdriver \$4. 925-443-1778

Cal.King Mattress & BoxSprings about 1.5 yrs.old excellent shape cost over\$800.new sell \$200. young kids twin bed with frame, & mattress 209-835-4790

Honda Professional Power Mower \$400, Refrig 15 cu ft, almost new \$300, Sears Cannister Vac with Power Brush \$75 925-449-1823 925-449-1823

Bedroom set: king bed, dresser with large mirror and amoire/entertainment center (off-white pine finish). Make offer. 925-606-1691

Vaby bed, simmonds, white, excellent condition 30inches x 54inches x 28inches deep. \$75.00. 925-447-4521

Armoire/Entertainment Center, solid oak in excellent condition; \$300 OBO, 209-825-7497

Step 2 Toddler car bed, 7 mos.old. \$85 Jennylind Crib, dark maple, turns into day bed, LN \$85. Crib/Toddler mattress, Sears 204 Coil, LN \$55 925-447-4961

Solid maple kingsize bookcase headboard & matching dresser w/mirror. Excellent cond. \$300.00 925-846-8405

Furniture sale. Relocating! Living room, kitchen, garage, and bedroom stuff. Please call for description. 925-426-0859

Solid Oak King Size Bed (Headboard) W/Drawers/Lights/Mirrors and lots of extras \$700 925-449-4093

HOT TUB - Big - Cal-Spa, 8 ft x 8 ft, redwood siding, new cover, two solar panels \$600 408-268-7924

Solid maple drop leaf table and chairs not available in great shape. \$60.00 209-576-0217

Large, pine dining room table with six chairs and matching china hutch. \$500 925-606-7482

Solid wood executive desk w/ file drawer. 34 x 60 inches. very good condition. \$100 OBO. 925-606-0755

Southwest Upholstered Swivel Rocking Chairs (2). Turquoise, tan, rust colors. \$100.00 for both. 925-426-1438

Moving sale! Queen waterbed frame w/ mattress \$90, sofa bed \$65, coffee table, dinning table & chairs \$20, folding chairs, stereo, cabinets & more. 925-373-0493

Outdoor lights, large, heavy, wrought iron Spanish style. \$50/ro each. 925-443-2465

Kitchen Table: Glass top w/black legs and 6 black, leather-like chairs. Excellent Condition. \$200. 925-216-4834

Bedroom Set, Double. Bow-front 1940s blonde Phil. mahog. Dresser, round mirror, bench, night stand. \$950.00 firm. 925-934-2918

Moving - Dining Rm w/Hutch \$250; Dinette Set \$100; Dock Ladder \$75; Child Hot Wheels Jeep \$75; 3-Piece Sectional \$350; Air Compressor \$50. 925-634-7513

Bedroom Set. King Flotation Water Bed Mattress (5 yrs old). King 4-poster dark Oak head Board, frame, and base board. Excellent Condition. Set - \$500 925-679-2680

LOST & FOUND

Lost on 7/6: Car keys in the vicinity of T-1471/T-1478. I can identify keyring. 209-824-3150

Found: Jacket, Tan, corduroy, Rubbish brand, found in lab bicycle basket. 925-443-5418

MISCELLANEOUS

Office Desk 29x62in. Right return 18x41in. center drawer, file drawer. \$50.00 925-455-9943

Briquette starter, electrical element to quickly ignite bbq charcoal, \$4 925-447-2508

2-Craftsman, 1-1/2hp-Routers, one never used, both in cases. \$45.00 and \$50.00, Craftsman, Router-Recreator(3-Dimensional) \$100.00, All have manuals. 925-447-1009

Elec Typewriter, preview & erasing.Unused. \$25. Elec Roaster,covered \$8.Secy adjustable chair \$14. Folding Sawhorse kit in box, unused \$15 925-443-1778



CLASSIFIED ADS

Graco Neat Seat High Chair. Adjusts to 5 different heights and reclines to 3. Grows with your baby. Great Condition. New \$49.99, sell for \$30.00. 925-373-0751

Full size desk w/5 drawer \$75, tall bookcase \$75, end table \$25 walnut finished wood 925 449-1823 925-449-1823

POKEMON CARDS - 90 different types of cards, around 200 altogether, 12 sheets of cards. Asking \$80. 925-443-8889

Child-size table: solid pine with two drawers and two chairs with star cutout \$85 925-243-9123

Garage/Moving Sale Sat., 7/22. 7547 Sunwood Drive, Dublin, 8am to 4:00 pm. Lots of stuff to choose from. Tools to household items. 925-829-2674

Delta 1-in. belt sander small bench type \$20 925-447-6728

X-MEN Comic Books, Autographed by the artists and writers, several available, Certificate of Authenticity,\$60-\$75 each 925-443-4895

Craftsman electric edger used a half dozen times almost new. \$30.00 209-576-0217

Cherished Teddies Collectors Figurines. 12 month set and others.Selling for at least \$10 less then estimated worth. For selection/ prices-39977 or 925-216-4834

Beanie Baby: The Beginning Bear \$20.00 Beautiful Silver and Gold stars on White Bear. Excellent Condition 209-234-2050

MOTORCYCLES

1987 - & 1985 Hondas: XR600 runs great/good cond. XR350 runs great/ good cond. (needs trans. work). Take pair \$1,500. 209-239-3293

1979 - BMW, R-100-RT, 17,700 miles, 1,000cc, must see in great condition. \$4,500. 510-581-7655

MUSIC INSTRUMENTS

Piano, old Baby Grand, Haynes-Chicago. \$2000 Evenings 209-835-4197

Electric guitar, Fender telecaster, USA made,1952 model re-issue w/documentation, tweed hard case, all mint condition w/60 watt amp. \$900. 925-778-6868

PETS & SUPPLIES

IGLOO dog house for medium size dog. Used only 6 months. Good condition. \$55 925-243-9123

Dauchshund puppies-mini,AKC w/champion lines 8 wks old, have 2nd shots,1 red-dapple female \$650,1 wild bore brindle male \$600 avail.7/22 CASH ONLY. 925-776-5612

KITTENS 8 weeks old, free. 209-239-8171

Australian Sheppard, young adults & pups blues and blacks, males & females; need homes. Call for info. 209-368-3112

RECREATION EQUIPMENT

BASKETBALL HOOP, spring mount, with old plywood back-board, only \$12 Livermore 925-447-7070

Stair Stepper, Lifestep 5500. 3 profiles, fitness test, Gym quality. Excellent contdition. \$350.00

209-239-3961

Camping Lantern, gasoline. Unused. \$9. Also Gasoline Stove. 925-443-1778

1985 Vacationeer 11.5 ft. camper. Sleeps 4, fully self-contained. A/C, AM/FM cassette, hydrolic jacks. Excellent cond. \$7,500.00. 925-456-3010

Sports tube, tow rope, air pump, safety flag. BRAND NEW used once. Great for ski boat or personal watercraft. Complete package \$50. 209-462-8077

Calloway Great Big Bertha driver, 8 degree loft, Grafalloy Pro-lite shaft, \$185 B/O. 209-522-2492

Blizzard downhill snow skis - 190mm - great shape. \$50.00 209-576-0217

Dock Ladder \$75.00 925-634-7513

Two 7mm wetsuits, size medium. Well-used but plenty of dives left. Outgrown by the boys. \$20 each. 925-455-4392

RIDESHARING

Express your commute, call 2-RIDE for more information or visit the web site at <http://www-r.llnl.gov/tsmp/> for more information

Oakley - Van Pool serving Antioch, Oakley, Brentwood and Byron/Discovery Bay. Beat the Bus for less \$\$\$\$. Work hrs 8-4:45. 925-625-0534, ext. 2-2174

Fremont - Vanpool and avail of pretax program too. Route accessible from Hayward/Union City/Fremont/Mission Blvd.LLNL schedule 8am-5pms. 510-792-7848, ext. 4-3791

Modesto - Ride for \$70/mo. Leave from Kansas & Rosemore. LLNL schedule 8-5. 209-526-4404, ext. 2-0454

Lafayette - LaMOrinda (and Walnut Creek at Rudgear Rd) Vanpool. Luxury van (reclining seats, reading lights) 8-4:45, \$115/mo (pretax reduction available) 925-376-5346, ext. 2-3005

Richmond - Riders needed, 1999 14-passenger van operating from Richmond through El Cerrito, Albany, Berkeley, with stops in Oakland; 8:00-4:45. 510-223-4244, ext. 2-3193

San Mateo - Riders needed for this 14 passenger van, with capt chairs, AC, and reading lights. 650-341-5795, ext. 3-7857

Discovery Bay - Carpool of two looking for one or two more people to share driving. Hours 7:30 am to 4:15 pm. 925-634-3371, ext. 3-9833

Manteca - Need fourth rider for 7:00-3:30 shift. Drive one day per week and one extra rotation per month. Leave Manteca 6:00 am. 209-823-8309, ext. 2-5158

Oakland - Montclair/580, friendly vanpool, reading lights 8:15 - 5; Stops Montclair village, Lincoln /Hwy 13, Keller/ Hwy 580; \$115/Mo. 510-547-4040, ext. 2-0064

Patterson - Vanpool has seats available. Work hours 7:30-4. Take advantage of the pretax transportation program. \$110/mo. 209-892-2118, ext. 2-9502

SERVICES

Tree Stump Removal & Sprinkler Repair. FREE Estimates 925-443-6010

Roofing, 28 years eperience, fully insured 925-454-9200

Catering by Paul. Caterer of 10 years. Available for Barbeques, Banquets & Weddings. 209-832-8587

House cleaning By Harriette, experienced, reasonable rates, references, call after 3 p.m. Tri-Valley area only. 925-245-0703

SHARED HOUSING

Livermore - furnished room for rent. Clean/quiet. \$500.00/month. Deposit required. Long term/mature renter preferred. Share kitchen. 925-449-1128

Livermore - Room for rent: Available September 1st, private bath, 6 miles from LLNL, quiet individual,\$500/mo \$300 deposit. 925-455-5938

Livermore - Quiet southside home, large bdrn, phone hookup, laundry and kitchen privileges, all utilities paid, 2 blocks from city transit lines, \$550. 925-443-0485

TRUCKS & TRAILERS

1993 Ford Explorer, excel.cond, 2wd, tow pkg, CD, leather, 6cyl, auto, new tires, brakes, rotars, trans, 100K mi., \$8700, 925-449-6963

1996 - 29 Foot Sea Breeze Moterhome for sale. Has TV, roof air, AC generator, awning, HWH levelers. Well maintained, clean unit. Price \$37,000. 925-447-5016

1998 - Dodge Van, 3500 RAM-15 passenger, new tires and brakes. Great for van pool. 34k miles, with transferable 5yr/75k wrnty.\$24,000. after 6pm 925-625-0534

1988 - one-ton Toyota Pickup; 125,000 miles; fair condition; will accept best offer. 925-363-1941

1973 - Chevy C-10 Pick-up, 350 LT-1, custom paint, suspension, exhaust. New tires. \$6500. 925-373-6870

1979 - Fireball,Dodge Class C 23ft. Motorhome,Sleeps 6, Runs very well, Less than 40k original miles,Just smogged,Very clean inside and out \$4500 OBO 925-443-4895

1999 - FORD Explorer Sport (Blue) 4x4, 16Kmi, CD, AC, PwrWin/ Locks, Cruise, Tow, Exc. Cond. \$23K OBO. 209-824-9880

8 ft Stockland Camper Shell White Fits Chevy. and GMC Camper Kit included \$850 OBO 925-455-8788

1995 - Wilderness 24 foot model 24C, Front located Kitchen,Central H/A, Awnings on all windows. \$10,000.00 OBO. 209-406-1744

1988 - Compact Toyota Pickup; 79,000 miles; fair condition; will accept best offer. Call ext. 2-2803 days and 925-363-1941 nights. 925-363-1941

1989 - MOTORHOME EIDorado, 29ft, 45Kmi, Ford480, Sleeps 6, 2ACs, 4Kgen, Lg refrig/frzr, Micro/Conv, Bath/Shower, RoofPod, Cass, Lot of Storage. \$14,500. 209-833-7573

1989 - Chevy 4X4 Pick-up Truck - (runs good), Sportside standard cab with lots of extras. flowmaster, rancho, etc... \$8,500.00 obo. 209-830-7576

1979 - GMC 3/4T HD PU 350/4speed Burnt exh valve,non oped, and needs TLC, as is

Check out the Employee Ads Web Services site at: <https://www-ais.llnl.gov/newsline/ads/>

\$750.00 Joe 209-869-2792

1997 - class A allegro Motor Home 28ft 22kmiles very clean and ready to go.asking 46500.00 fully self contained. 209-823-3756

1992 - Chevy Tahoe 350/auto-matic 2 door 4X4 tow package ps pb pw pl great cond must sell blue bk is \$13800, buy this one for \$12,500 obo. 510-657-6379

1992 - Chevy Silverado, 1/2 ton, Automatic, A/C, AM/FM Cassette, Bedliner, Lumber rack. One ding in fender - otherwise in good condition. \$9000 OBO. 209-599-5767

1995 - RV Thor 36 feet Diesel, Cummins. Excellant Condition. 85K, Call for details. 925 925-449-0430

1997 - Ford Ranger stepside ext cab V6 automatic, pwr win/drs, bedliner, CD 75,000 miles,100k extended warranty 13,500 or B/O 209-823-9607

1995 - Suburban SLT 2500,4x4,3/4 ton,454,Loaded, towing pkg,98K miles. \$17,900 Must sell Moving 925-449-1340

1971 - Chevy Blazer 4x4. 350 V8, 350 AT, 205 transfer case, AC, CD, 35 inch tires. Too much to list! Must sell to start adoption proceedings! \$13500 209-463-6457

1997 - Explorer XLT 4WD, 205HP 4.0L V6, Auto, A/C, Tilt, Cruise, Leather, Power everything, CD Chgr, Alarm, Michelins, liner. 39.7K miles \$20,995 209-239-6200

VACATION RENTALS

Sea Ranch - - oceanview vacation home, 2-4 adults, no pets, no smoking, 2BR/2BA, 1700sqft, whale watch, hike, kayak, swim, tide pool. 925-443-5086

Las Vegas, Nevada - , Comdex Week Fall 2000, next to the new Paris Resort Casino \$250 weekend or \$600 week. Nov. 11-18, 2000, 209-956-9117

Maui, HI - Kahana Reef ocean-front 1BR/1BA condominium. Beautiful two-island view, ocean-side pool, and BBQs. Low LLNL rates for year-round reservations. 925-449-0761

SOUTH LAKE TAHOE - 3 Bedroom 2 Bath Chalet, nicely furnished,quiet area , all amenities,Homeowners park with lake,etc. Great for Vacation!

209-599-4644

Maui, HI - Kihei - - 1 Bedroom, 2 Bath at Kamaole Sands. Beautiful garden view. Large lanai. Across street from Kamaole III Beach. 925-461-3698

WANTED

Wanted, Honda trail 90. 925-846-3592

Heavy-duty file cabinets in good-working condition. Cosmetic blemishes OK. 510-728-4336

Single cockpit, 16-18 foot kayak with rudder, paddle and saddles for Yakima rack 209-839-8021

1968 transmission or case off vw 209-838-1385

Wanted 45 RPM records in good condition, especially 50s and 60s. 925-454-9291

WANTED: Brags and Scranton 5 hp motor for little girls mini bike. Call evenings after 7pm. 925-778-2951

WANTED: A Place to park a vacant 25 ft. motorhome for 1 to 2 weeks at a time. 800-215-9031

Wanted: VHS camcorder, full-size.† Must be in good working condition and must have remote microphone capability.925-447-2052

Water skiers! Have boat, need skiers to share the fun for half or full day Delta trips. Beginner to advanced, male or female 925-449-4338

WANTED: old wind up record player all or parts. 925-449-0388

Wanted: Townhouse (2-3 bdrn.) to rent by Lab employee in Dublin/San Ramon/Pleasanton area; please call evenings. 925-828-9573

Auto tow dolly to rent for three weeks in August or buy it. call after 6 209-476-9420

Wooden row boat, preferably with trailer. 209-962-6612

Wanted: Duplex or Condo to rent in Modesto area starting around September. Very clean female with one pet looking to rent. 925-373-3483

Musicians for Lab Big Band. We need a guitar player and 2 trombones. Rehearsals are Wed. night, 7:30-9:30 PM, at the South Cafeteria. 925-443-2245

Guidelines

Newsline is not responsible for any errors contained in the classified ads. It is up to the employee to proofread his or her ad to make sure it contains the correct data, including the phone number.

Employees are reminded that only car- and vanpool ads may contain Lab extensions. E-mail addresses are not allowed.

Due to space limitations, *Newsline* cannot run ads that are submitted in all capital letters. “Personals” ads are not permitted either.

Employees may submit one ad per category, but may not include the same ad in more than one category.

Ads may only be submitted through the Employee Ads Web Services site <https://www-ais.llnl.gov/newsline/ads/>

ISM

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Phase B-2 Verification will include an assessment of four directorates, which will be identified by DOE in early August. In addition, verification team members will visit facilities and interview employees randomly to assess their knowledge of ISM.

“Each of us needs to be able to explain our individual roles and responsibilities and how ISM is done in our work area, added Associate Deputy Director Den Fisher.

The Laboratory and DOE agreed to postpone Phase B-2 Verification to allow “a little more time for our system to mature,” explained Fisher. While the Lab did meet many of the objectives during Phase B-1 in May, the DOE team identified a set of “opportunities for improvement.”

Key areas for improvement are related to analyzing hazards and developing and implementing controls at the facility and activity levels. Other opportu-

Schedule for ISM safety management training

The ISM training package now includes five programs, beginning with “ISM Orientation” (IS0001), which was presented to all employees in 1999. The other four segments of the employee population were introduced throughout the year. They include: “How to Complete an Integration Worksheet” (IS0003), currently required for FPOCs; “Roles and Responsibilities for FPOCs” (IS0004); “Obtaining Procured Services” (IS0005), for TRRs, procurement personnel, ES&H team leaders and RIs; and the new “Roles, Responsibilities and Authorities for Work Planning and Authorization” (IS0007). For information on any of these courses or ISM, see the Web at: http://www.llnl.gov/es_and_h/ism/isms.html

The following is the schedule for “Roles, Responsibilities and Authorities for Work Planning and Authorization” (IS0007). All training, unless otherwise noted, will take place in Bldg. 123; employees will be required to take a

Web-based test following the training.

July 21, 9:30-11 a.m., RIs, Als, from Engineering, and Chemistry & Materials Science.

July 25, 1:30-3 p.m., RIs, Als from Defense & Nuclear Technologies, Energy, Biology & Biotechnology Research, Earth & Environmental Sciences and Lab Site Operations.

Aug. 3, 9:30-11 a.m., RIs, Als from Laser, Physics, Non Proliferation, Arms Control & International Security, Engineering.

Aug. 7, 1:30-3 p.m., RIs, Als, from Computation, Business Operations, Laboratory Site Operations and the Director’s Office.

Aug. 22, 1:30-3 p.m., Bldg. 481, RIs, Als, from NIF.

Each directorate will notify employees who need to take the training. If a selected date does not work for an individual’s schedule, the employee may attend one of the other sessions, space permitting.

duties, and making sure that the process for integrating environmental, safety and health concerns in work activities is consistent.

In addition to the training, each directorate will be required to update their ISMS implementation plan and gap analysis, and have in place a process for achieving and maintaining consistency between facility safety basis and operational documents, such as Integrated Work Sheets. Updated Directorate Implementation Plans are due to Bob Kuckuck’s office by Aug. 4, with finalization by Aug. 15.

“The overall objective is to ensure that facility-level hazards and worker protection controls are properly identified and included in operational documents,” Kuckuck said.

2020

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LLNL.”

Tom Isaacs, director of the Office of Policy, Planning and Special Studies, says exploring novel “far off” ideas was an important part of the two-year process culminating in the 50-page report. Members of the group were chosen for the diversity of views they would bring to the discussion of the Laboratory’s long-term future.

“I would’ve been upset if there hadn’t been strong disagreement,” Isaacs said. “We wanted them to have the freedom to discuss different ideas. A lot of the discussion was pretty intense. People got really involved and put a lot of energy into the project.”

The idea was to provide the Laboratory’s current and future leadership with food for thought on the Lab’s evolution over the next 10-20 years, and to bring together those people who would be among likely future leaders.

Director Bruce Tarter chartered the group in March 1998 to explore, analyze and evaluate new scientific and technical opportunities appropriate for the Laboratory; identify new programmatic needs where the Lab can play a significant role in the coming 10-20 years; and investigate effective ways of doing R&D business, including identifying potential sponsors.

Members were divided into subgroups to discuss a first set of topics, including nuclear deterrence in the 21st century; computations and communications; bio-science and biotechnology, and the future of public and private R&D. Teams then reorganized and discussed a second set of subjects: emerging national security threats; the “middle third of the Lab” — energy, environment and supporting disciplines; the public policy landscape in 2015, and the Laboratory workplace in 2015.

Simonson said, “people spoke from their strengths” and that discussions were “no-holds barred.”

“This was a really good group of people and we all learned a lot about each other’s programs,” he said, adding there was a “natural division between those that worked on national security on a day-to-day basis and those that didn’t.

“I’ve been closely associated with the weapons programs and I have strong opinions about what the program should be,” Simonson said. “I feel strongly that the weapons program will endure.

“But during the course of the project, I saw that outside the weapons programs there are a lot of people who will carry the Laboratory forward,” he said. “In my heart I feel the weapons program will be a signature mission of the Laboratory.”

Nonetheless, Simonson says that he has come to the view that if the weapons programs were to decline or even disappear “the Lab won’t necessarily go away. I see other important national programs that could sustain the Lab.”

Terri Quinn, assistant department head of the Scientific Computing and Communications Department, says it was important to look at numerous

nities for improvement include strengthening the Lab’s ability to track ES&H corrective actions, reinforcing procedures that assure that employees have completed the training needed to perform assigned

scenarios including the possibility the nuclear weapons program funding would decrease perhaps to zero. The Laboratory might evolve to address other “non-military threats” such as health issues (AIDS), environmental crises or attacks on the nation’s information infrastructure. There was agreement that whatever happens biology and biotechnology should be an increasingly large part of the future of the lab.”

“Just think about what has happened at the Lab in the last 10 years. Who would’ve predicted the growth of the Internet?” Quinn said. “There’s an almost unlimited set of possibilities for 10 years out.

“This was an accelerated educational process for me,” she added. “Though I knew the Laboratory had a great deal of technical expertise, I didn’t think the Lab had much impact on nuclear policy. But after hearing a presentation by Ron Lehman (of the Center for Global Security Research), it turns out we’ve had quite an impact on policy. It opened my eyes.”

While there was lively discussion over the future role of nuclear weapons, the consensus was that nuclear weapons would remain a Lab mission, though perhaps less important to programs addressing other emerging threats to national security. These include “novel biotechnology-generated threats, conflict and chaos stemming from shortages of natural resources, proliferation of missiles carrying weapons of mass destruction, and terrorist-style attacks on the nation’s critical infrastructure.”

There was strong agreement that computations — particularly simulation — lasers and biotechnology are areas that hold particular promise for the Laboratory’s future. “There is strong support for computer simulation,” said Quinn, who works on the Accelerated Strategic Computing Initiative. “Science research has traditionally been theory and experiment. In the future it will be theory, experiment and simulation.”

For Lisa Stubbs, a recent arrival to the Lab’s Biology & Biotechnology and Research Programs, the project served as an intense tutorial in Laboratory culture. “I felt like a person who dropped in from outer space,” Stubbs said. “It reminded me of traveling abroad. You can experience culture shock when you step out of your working group, because different Livermore directorates are so diverse.

“We really changed each other’s perspectives. To work effectively in a place like this, you need to understand the other perspective,” added Stubbs, a geneticist who leads a small group assigned to the genomics division. “Very often we stay in our huts here, and don’t venture out.

“The LRSP process gave me a greater appreciation of the people here. The Lab has an amazingly collegial atmosphere,” Stubbs said. “I now have a better feeling how biological research fits into this special context. I understand how science done at LLNL should, directly or indirectly, support the national security mission.”

One topic the group struggled with was how research would be financed in the future. “We did agree that one of the ways the Lab has to change is being less reliant on a small number of monolithic sponsors,” Simonson said.

On the other hand, there was agreement that the University of California’s management is key to the Laboratory’s long-term stability and ability to attract the best minds in science. “The interactions with other universities and labs is critical to our own success,” Simonson said.

Isaacs said the project achieved its main objectives of painting a future that was credible and, perhaps of even greater importance, bringing together people who will play an important role in forging the Laboratory’s future.

“By building cross-disciplinary, cross-cultural ties, the people who participated gained a more human view of the Laboratory,” Isaacs said. “This is in keeping with Ernest Lawrence’s model of team science.

“These people deserve a lot of credit. They did their jobs and this project,” he added.

Isaacs noted that two members of a 1981 effort to look 20 years into the Lab’s future became Lab directors — John Nuckolls and Bruce Tarter. Former Lab Director Mike May led that group.

“This was a challenge and a lot of good possibilities came to light during the discussions,” Simonson said. “But in a few years we’ll look back and laugh about some of the important things we missed.”

For additional information about the structure and process of the Long-Range Strategy Project, see Tom Isaacs’ Director’s Column in the April 21 edition of *Newsline*. You will find it on the Web, under the April headings, at <http://www.llnl.gov/llnl/06news/Employee/2000index.html>



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